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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,654	02/28/2002	Bernhard Mayr	1454.1217	2483

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WASHINGTON, DC 20005

EXAMINER
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DANIEL JR, WILLIE J

ART UNIT	PAPER NUMBER
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2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/08/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/084,654	MAYR, BERNHARD	
	<b>Examiner</b>	<b>Art Unit</b>	
	Willie J. Daniel, Jr.	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 October 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is in response to applicant's amendment filed on 18 October 2006. **Claims 1-9** are now pending in the present application. This office action is made **Final**.

### ***Claim Objections***

2. The objections applied to the claims are withdrawn, as the proposed claim corrections are approved.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the --handover method of claims 1 and 9-- must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted

after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Regarding drawings of the instant application, the drawings fail to show the radio communications system claimed. For example, Fig. 1 only illustrates base stations.

4. The drawings are objected to because applicant failed to number drawing sheets (see 37 CFR 1.84(t)). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. This list of examples is not intended to be exhaustive.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-2, 7, and 9** are rejected under 35 U.S.C. 102(b) as being anticipated by Bodin (US 6,122,512).

Regarding **claim 1**, Bodin discloses a handover method for a GSM mobile radio system which reads on the claimed “radio communications system” having a base transceiver station (e.g., BTS, BTS1-3) which reads on the claimed “first, second, and further transceiver units” (see col. 5, lines 16-30; Fig. 1), comprising:

signaling a mobile station (MS) and the second transceiver unit (BS2) from the radio communications system to indicate that a handover is to occur (see col. 6, lines 28-36; col. 5, lines 46-51; Figs. 1, 7), where base stations (BS1, BS2) are neighboring base stations;

sending a handover message from the mobile station (MS) to the second transceiver unit in order to set up a connection to the second transceiver unit, the handover access message signal which reads on the claimed “handover signaling message” being sent via channel that carries signaling messages for requesting a radio link, the handover signaling message containing a code word differentiation the handover signaling message from signaling

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messages for requesting a radio link (see col. 6, lines 25-50; col. 5, lines 46-55; col. 5, line 67 - col. 6, line 1; Figs. 1, 7);

checking the code word at the second transceiver unit and at one of the further transceiver units to determine whether a handover signaling message or a signaling message for requesting a radio link has been received (see col. 7, lines 1-6; col. 6, lines 5-9,43-50; col. 5, lines 16-22; Fig. 1), where the MS transmits messages to the neighboring base station for handoff and the message is checked for the correct control data;

identifying the received signaling message at the one of the further transceiver stations as a handover signaling message on the basis of the code word (see col. 7, lines 1-6; col. 6, lines 5-9,43-50; col. 5, lines 16-22; Fig. 1), where the MS transmits messages to the neighboring base station for handoff;

ignoring, on the basis of the identification of the received message by the one of the further transceiver units, the handover signaling message (see col. 7, lines 1-6; col. 6, lines 5-9,43-50; col. 5, lines 16-22; Fig. 1), where the MS transmits messages to the neighboring base stations for handoff and the message is checked for the correct control data.; and

proceeding with the handover at the second transceiver unit based on the code word and the signaling from the radio communication system (see col. 6, lines 25-40; Figs. 1 and 7), where the BSC provides signaling commands for the connections to be handed over from BTS1 to BTS2..

Regarding **claim 2**, Bodin discloses the method as claimed in claim 1, wherein the handover code is stored in each of the transceiver units (BTS) (see col. 7, lines 1-4; col. 6, lines 45-46), where the base station (BTS) check for the correct control data (HO

reference value) in which the "handover code is stored" would be inherent to verify the correct code,

the value of the code word received with a signaling message is compared with the handover code stored in each of the further transceiver units (BTS) (see col. 7, lines 1-4; col. 6, lines 45-46; Figs. 1, 7), where the base station (BTS) check for the correct control data (HO reference value) in which the "handover code is stored" would be inherent to verify the correct code;

if the value of the code word matches the handover code, the signaling message is identified as a handover signaling message (see col. 7; lines 1-4; col. 6, lines 45-46; Fig. 7).

Regarding **claim 7**, Bodin discloses the method as claimed in claim 1, wherein at least one of the transceiver units (BTS) is a base station (BTS) (see col. 5, lines 16-22; Figs. 1, 7-8).

Regarding **claim 9**, Bodin discloses a handover method for a radio communications system having a first, second and further transceiver units (BTS) (see col. 5, lines 16-30; Figs. 1, 7), comprising:

signaling a mobile station (MS) and the second transceiver unit (e.g., BTS2) from the radio communication system (e.g., BSC) to indicate that a handover is to occur (see col. 6, lines 25-40; Figs. 1 and 7), where the BSC provides signaling commands for the connections to be handed over from BTS1 to BTS2;

sending a handover signaling message (e.g., handover access message) from the mobile station (MS) to the second transceiver unit (e.g., BTS2) in order to set up a connection to the second transceiver unit (e.g., BTS2), the handover signaling message being sent via a

channel, which also carries signaling messages for requesting a radio link, the handover signaling message (e.g., handover access message) containing a code word differentiating the handover signaling message (e.g., handover access message) from signaling messages for requesting a radio link (see col. 6, lines 25-51; col. 5, lines 46-55; col. 5, line 67 - col. 6, line 1; col. 7, lines 1-4; Figs. 1, 7), where the MS sends a handover access message to the BS which includes the control data (HO reference value) and the MS sends additional access signals to establish link to complete the handing off;

checking the code word at one of the further transceiver units (BTS) to determine whether a handover signaling message or a signaling message for requesting a radio link has been requesting a radio link has been received (see col. 7, lines 1-6; col. 6, lines 5-9,43-50; col. 5, lines 16-22; Fig. 1), where the MS transmits messages to the neighboring base station for handoff and the message is checked for the correct control data;

identifying the signaling message received at the one of the further transceiver stations (BTS) as a handover signaling message on the basis of the code word (see col. 7, lines 1-6; col. 6, lines 5-9,43-50; col. 5, lines 16-22; Figs. 1, 7), where the MS transmits messages to the neighboring base stations for handoff in which the base station with a stronger signal that the MS is within range will be the base station to carry out the handover; and

proceeding with the handover at the second transceiver unit (e.g., BTS2) based on the code word and signaling from the radio communication system (BSC) (see col. 6, lines 25-40; Figs. 1 and 7), where the BSC provides signaling commands for the connections to be handed over from BTS1 to BTS2.



***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 3-6 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodin (US 6,122,512) in view of Demetrescu et al. (hereinafter Demetrescu) (US 6,647,262 B1).

Regarding **claim 3**, Bodin discloses the features

the HO reference value which reads on the claimed “value” of a code word received with a signaling message is compared to the handover code (see col. 7, lines 1-6; col. 6, lines 45-46; Fig. 7), where the message is checked for the correct control data,

if the value of the code word matches the handover code, the signaling message is identified as a handover signaling message (see col. 7, lines 1-6; col. 6, lines 45-50; Fig. 7). Bodin fails to disclose having the features wherein the handover code comprises a number of values, values of the handover code, and one of the values of the handover code. However, the examiner maintains that the features wherein the handover code comprises a number of values, values of the handover code, and one of the values of the handover code was well known in the art, as taught by Demetrescu.

In the same field of endeavor, Demetrescu discloses the features wherein the handover reference number (HO\_REFERENCE\_N) which reads on the “handover code” comprises a number of values (see col. 4, lines 53-60; col. 6, line 47), where the handover reference number is an 8 bit number which provides a number of values,

values of the handover code (see col. 4, lines 53-60; col. 6, line 47), where the handover reference number is an 8 bit number which provides a number of values to indicate handover, and

one of the values of the handover code (see col. 4, lines 53-60; col. 6, line 47), where the handover reference number is an 8 bit number which provides a number of values that is used to indicate handover.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bodin and Demetrescu to have the features wherein the handover code comprises a number of values, values of the handover code, and one of the values of the handover code, in order to force handover of a mobile station to a selected cell of a multicell network, as taught by Demetrescu (see col. 2, lines 25-31).

Regarding **claim 4**, Bodin discloses the features

the HO reference value which reads on the claimed "value" of a code word received with a signaling message is compared to the handover code (see col. 7, lines 1-6; col. 6, lines 45-46; Fig. 7), where the message is checked for the correct control data,

if the value of the code word matches the handover code, the signaling message is identified as a handover signaling message (see col. 7, lines 1-6; col. 6, lines 45-50; Fig. 7). Bodin fails to disclose having the features wherein the handover code comprises a number of values, values of the handover code, and one of the values of the handover code. However, the examiner maintains that the features wherein the handover code comprises a number of

values, values of the handover code, and one of the values of the handover code was well known in the art, as taught by Demetrescu.

Demetrescu further discloses the features wherein

the handover reference number (HO\_REFERENCE\_N) which reads on the "handover code" comprises a number of values (see col. 4, lines 53-60; col. 6, line 47), where the handover reference number is an 8 bit number which provides a number of values,

values of the handover code (see col. 4, lines 53-60; col. 6, line 47), where the handover reference number is an 8 bit number which provides a number of values to indicate handover, and

one of the values of the handover code (see col. 4, lines 53-60; col. 6, line 47), where the handover reference number is an 8 bit number which provides a number of values that is used to indicate handover.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bodin and Demetrescu to have the features wherein the handover code comprises a number of values, values of the handover code, and one of the values of the handover code, in order to force handover of a mobile station to a selected cell of a multicell network, as taught by Demetrescu (see col. 2, lines 25-31).

Regarding **claim 5**, the combination of Bodin and Demetrescu discloses every limitation claimed, as applied above (see claim 3), in addition Bodin further discloses the method as claimed in claim 3, wherein

the mobile station (MS) receives from the radio communications system a command to initiate the handover procedure, which command contains information about the second transceiver unit (BTS2) and identifies the handover procedure (see col. 6, lines 28-32; Fig. 7),

the radio communications system transmits information about the handover procedure to the second transceiver unit (BTS2) (see col. 6, lines 32-40; Fig. 7), and

further transceiver units (BTS) which receive the handover signaling message from the mobile station (MS) check whether the code word contained therein has a value matching the handover code and, if the value matches the handover code, the further transceiver units reject the handover signaling message (see col. 7, lines 1-6; col. 6, lines 5-9, 43-50; col. 5, lines 16-22; Fig. 1), where the MS transmits messages to the neighboring base stations for handoff and the message is checked for the correct control data.

Regarding **claim 6**, the combination of Bodin and Demetrescu discloses every limitation claimed, as applied above (see claim 4), in addition Bodin further discloses the method as claimed in claim 4, wherein

the mobile station (MS) receives from the radio communications system a command to initiate the handover procedure, which command contains information about the second transceiver unit (BTS2) and identifies the handover procedure (see col. 6, lines 28-32; Fig. 7),

the radio communications system transmits information about the handover procedure to the second transceiver unit (BTS2) (see col. 6, lines 32-40; Fig. 7), and

further transceiver units (BTS) which receive the handover signaling message from the mobile station (MS) check whether the code word contained therein has a value matching the handover code and, if the value matches the handover code, the further transceiver units reject the handover signaling message (see col. 7, lines 1-6; col. 6, lines 5-9, 43-50; col. 5, lines 16-22; Fig. 1), where the MS transmits messages to the neighboring base stations for handoff and the message is checked for the correct control data.

Regarding **claim 8**, the combination of Bodin and Demetrescu discloses every limitation claimed, as applied above (see claim 6), in addition Bodin further discloses the method as claimed in claim 6, wherein at least one of the transceiver units (BTS) is a base station (BTS) (see col. 5, lines 16-22; Figs. 1, 7-8).

***Response to Arguments***

8. Applicant's arguments filed 18 October 2006 have been fully considered but they are not persuasive.

Examiner respectfully disagrees with applicant's arguments as the applied reference(s) provide more than adequate support and to further clarify (see the above claims and comments in this section).

9. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Thomas et al. (US 6,212,385 B1) discloses "Cellular Communication System and Re-Use Pattern Therefor".
  - b. Ward et al. (US 5,542,097) discloses "Method and System for Confirming the Identity of a Target Cell for Handoff".

- c. Schmidt (US 4,765,753) discloses "Method and Apparatus for Handing-Over a Radio Connection From One Radio Cell to Another Radio Cell of a Digital Radio Transmission System".

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (571) 272-7907. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WJD,JR/

WJD,JR  
31 December 2006

  
ERIKA A. GARY  
PRIMARY EXAMINER